



# **RISK MANAGEMENT, EMERGENCY PREPAREDNESS & DISASTER RESPONSE Workshop Part B**

Utah Field Services

Utah Division of Arts and Museums

November 3, 2022: Wasatch County Library, Heber

10 am - 5 pm



NATIONAL  
ENDOWMENT  
FOR THE  
HUMANITIES



# PROGRAM OVERVIEW: Year at a Glance

## ~~1. ACCESS AND ARTIFACT HANDLING~~

JANUARY  
FEBRUARY  
MARCH

Workshop  
(pt A & B)  
1. Webinar  
2. Webinar  
3. Webinar

## ~~2. PRESERVATION IN STORAGE AND DISPLAY~~

APRIL  
MAY  
JUNE

Workshop  
(pt A & B)  
1. Webinar  
2. Webinar  
3. Webinar

## ~~3. ENVIRONMENT AND BUILDING SYSTEMS~~

JULY  
AUGUST  
SEPTEMBER

Workshop  
(pt A & B)  
1. Webinar  
2. Webinar  
3. Webinar

## 4. RISK MANAGEMENT, EMERGENCY PREPAREDNESS & DISASTER RESPONSE

OCTOBER  
NOVEMBER  
DECEMBER

Workshop  
(pt A & B)  
1. Webinar  
2. Webinar  
3. Webinar



# GOALS

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Gain a better  
understanding of  
Key Themes...



## Key Themes

- Learn methods for collections disaster salvage
- Practice object handling and stabilization in water salvage
- Practice damage assessment
- Learn to manage teams during a disaster response

# AGENDA

## Handout



## Risk Management, Emergency Preparedness & Disaster Response

### Workshop Part B Agenda

Wasatch County Library, Heber

November 3, 2022

#### Learning Goals for Workshop pt B

1. Learn methods for collections disaster salvage
2. Practice object handling and stabilization in water salvage
3. Practice damage assessment
4. Learn to manage teams during a disaster response

#### Agenda

10:00-10:10	Housekeeping- overview and introductions
10:10-10:40	Go Over Homework
10:40-10:50	Overview on risk, building systems and preparedness
10:50-11:10	Introduce salvage and possible response scenarios
11:10-11:20	<b>BREAK (10 min)</b>

11:20-12:20	Wet Salvage Tabletop Activity
12:20-1:20	<b>LUNCH (1 hour)</b>

1:20-2:00	Tour site and discussion with Juan Lee
2:00-2:30	Teams for response; next steps
2:30-2:40	<b>BREAK (10 min)</b>
2:40-4:10	Condition assessment, object cleaning, plans for next steps
4:10-4:30	Reflections on Activity
4:30-5:00	Wrap up, Evaluation

# INTRODUCTIONS

**THANK YOU TO OUR HOST:** Wasatch County Library, Heber

Housekeeping: Restrooms, lunch options etc.

Introductions to each other

Please share the following:

1. Name
2. Where you work, your role and how long you have worked there
3. What are the biggest risks in your region and how prepared is your institution?



# HOMEWORK

- Preparedness Questionnaire
- Begin Drafting Your Plan



## Risk Evaluation and Planning Program Suggested Contents of a Basic Emergency Plan That Addresses Collections

- A. Staff and Emergency Contact Information  
\*Use tab 1 from the *Field Guide to Emergency Response*
- Fire
  - Police
  - Medical
  - Staff contact information with planning and response duties
- B. Insurance, Recovery Vendor, and Supply Information  
\*Use tab 3 from the *Field Guide to Emergency Response*
- Insurance and recovery vendor contact information (local and national options)
  - Supply list with location information or method of procurement
- C. Preparedness and Response Instructions
- Procedures for top-rated risks, including:
    - if applicable, what to do in preparation for an emergency
    - first steps to take upon discovery of the situation
    - how to assess the situation
    - response options
  - Utility shut-off locations and instructions (on a floor plan if possible) (Use tab 2 from the *Field Guide to Emergency Response*)
  - Evacuation procedures (for people and collections)
  - Shelter-in-place procedures (for people and collections)
- D. Collections Priorities  
\*Use tab 2 from the *Field Guide to Emergency Response*
- Removal and salvage priorities (on a floor plan if possible)
- E. Communications
- Communication with and among response team members
  - Dealing with the press and the public
- F. Policy for Updating, Distributing, and Practicing the Plan
- Outline under what circumstances and/or what timeline the plan should be reviewed
  - List who should receive a copy of the plan, including staff members, the local fire department, emergency management agency, and recovery contractors
- G. Appendices
- Collections salvage techniques (existing literature can be used)
  - Consultant and vendor contracts
  - Forms (such as Field Guide tabs)

Risk Evaluation and Planning Program

Suggested Contents of an Emergency Plan

### A. Participant Information

- A1. Institution: \_\_\_\_\_
- A2. Project Contact:  
Name: \_\_\_\_\_ Title: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
E-mail: \_\_\_\_\_
- A3. Mailing address: \_\_\_\_\_
- A4. City: \_\_\_\_\_ A5. State: \_\_\_\_\_ A6. Zip: \_\_\_\_\_
- A7. Physical address (if different from mailing): \_\_\_\_\_
- A8. City: \_\_\_\_\_ A9. State: \_\_\_\_\_ A10. Zip: \_\_\_\_\_
- A11. Web address: \_\_\_\_\_

### B. Staff Responsibilities

- B1. Who has responsibility for each of the following activities? (e.g., title of staff member, outside service, etc. Answer "don't know" if unsure.)
- |  | No one                   |                          |                          |
|--|--------------------------|--------------------------|--------------------------|
|  | Yes                      | No                       | Don't Know               |
| • Emergency planning and implementation          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Preparing collections for research and storage | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Cleaning and repairing collection material     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Inspecting storage and exhibition areas        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| • Building maintenance                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
- B2. Is a formal orientation or training provided for staff (paid and unpaid) in the following areas?
- |   | Yes                      | No                       | Don't Know               |
|---|--------------------------|--------------------------|--------------------------|
| • Emergency plan and procedures           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Title of person providing training: _____ |                          |                          |                          |
| • Collection preservation activities      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Title of person providing training: _____ |                          |                          |                          |
| • Building maintenance and repair         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Title of person providing training: _____ |                          |                          |                          |
| • General housekeeping and cleaning       | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Title of person providing training: _____ |                          |                          |                          |
- B3. If a board governs the organization, how many members are on the board?  
\_\_\_\_\_ ☐ N/A
- B3a. What is the term of service? \_\_\_\_\_ ☐ N/A

# INTRODUCTION TO RISK MANAGEMENT

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# THIS QUARTER'S GOT EVERYTHING



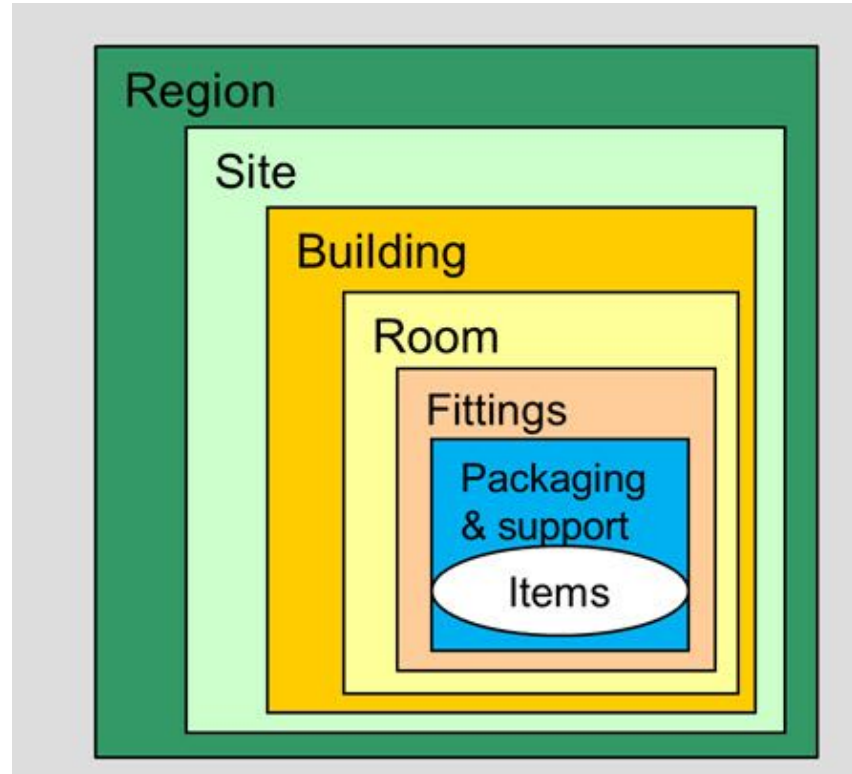
- Collections Handling
- Rehousing
- Collections Hazards
- Personal Health and Safety
- Policies and Procedures
- Planning and staff/volunteer training
- Building Systems
- Collections Environments





# LEVELS OF ENCLOSURE AND RISK

**Risk Management** is the comprehensive evaluation of risks to your organization: people, collections, and infrastructure. Assessing risks, focusing on both the severity and likelihood of a risk's impact, should inform all emergency and disaster planning.



# RISK ASSESSMENT

RISK EVALUATION AND PLANNING PROGRAM			
Risk Prioritization Worksheet: Key			
Likelihood of Occurrence	Severity of Damage	Risk Rating	Comments
1 = Not likely	1 = No damage	Higher the number, higher the risk	Note information about previous occurrences, response times, or additional insights.
2 = Possible	2 = Slight (minor damage requiring in-house clean-up or repair; operations continue to function; small monetary investment)	Ratings of 16-25 will fill with red	
3 = Quite possible		Ratings of 6-15 will fill with yellow	
4 = Likely	3 = Moderate (damage requiring extra labor; operations may need to be suspended; moderate monetary investment to return to regular operations)	Ratings of 1-5 will fill with green	
5 = Very likely	4 = Severe (damage requiring outside services and vendors; temporary suspension of operations; significant monetary investment)		
	5 = Very severe (damage resulting in total loss; indefinite closure of institution)		



## RISK EVALUATION AND PLANNING PROGRAM

### Risk Prioritization Worksheet

HAZARDS	Likelihood of Occurrence (1-5)	multiplied by	Severity of Damage (1-5)	equals	Risk Rating	Comments
<b>1. EXTERIOR: Natural disasters</b>						
1a. earthquake		X		equals	0	
1b. flooding below ground level or below the water table		X		equals	0	
1c. flash flood		X		equals	0	
1d. hail		X		equals	0	
1e. heavy snow		X		equals	0	
1f. high winds		X		equals	0	
1g. hurricane		X		equals	0	
1h. ice		X		equals	0	
1i. land/mud slide		X		equals	0	
1j. lightning strike		X		equals	0	
1k. loss of water supply for firefighting		X		equals	0	
1l. major flooding		X		equals	0	
1m. minor flooding		X		equals	0	
1n. terrain fire		X		equals	0	
1o. tidal or other unusual water phenomena		X		equals	0	
1p. tornado		X		equals	0	
1q. volcanic activity		X		equals	0	
1r. wind damage from flying debris		X		equals	0	
1s. wind damage from trees		X		equals	0	
<b>2. EXTERIOR: Incidents in the surrounding community</b>						
2a. frequent or major interruption of utility services (power, gas, water, phone, cable)		X		equals	0	
2b. damages from a fire, explosion, or chemical spill at an adjacent or nearby facility		X			0	

# EMERGENCIES AND POTENTIAL DISASTER SOURCES

## EXTERNAL HAZARDS

- Hurricane
- Severe winter storms
- Flooding
- Earthquake
- Wildfire/Forest Fire
- Water Main Break
- Sewer System Backup
- Proximity to Hazardous Materials or Activity
- Terrorist Attack (or Riot/Civil Disturbance)

## INTERNAL/BUILDING HAZARDS

- Building and/or mechanical systems (e.g., leaky roof, inadequate electrical system)
- Detection and alarm systems (e.g., fire, security)
- Personnel and procedures (e.g., inadequate backup of records, poor staff training)
- Maintenance issues (e.g., insufficient inspections and repairs).

# EMERGENCIES AND POTENTIAL DISASTER SOURCES

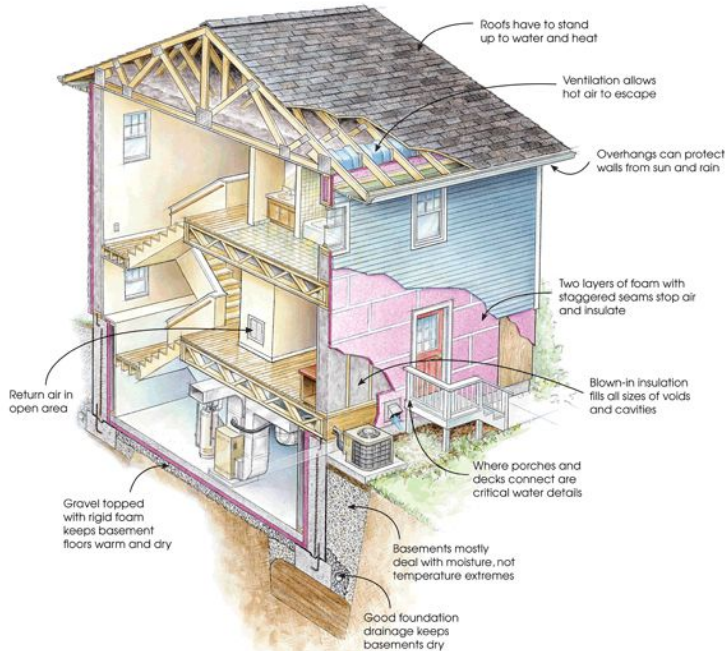
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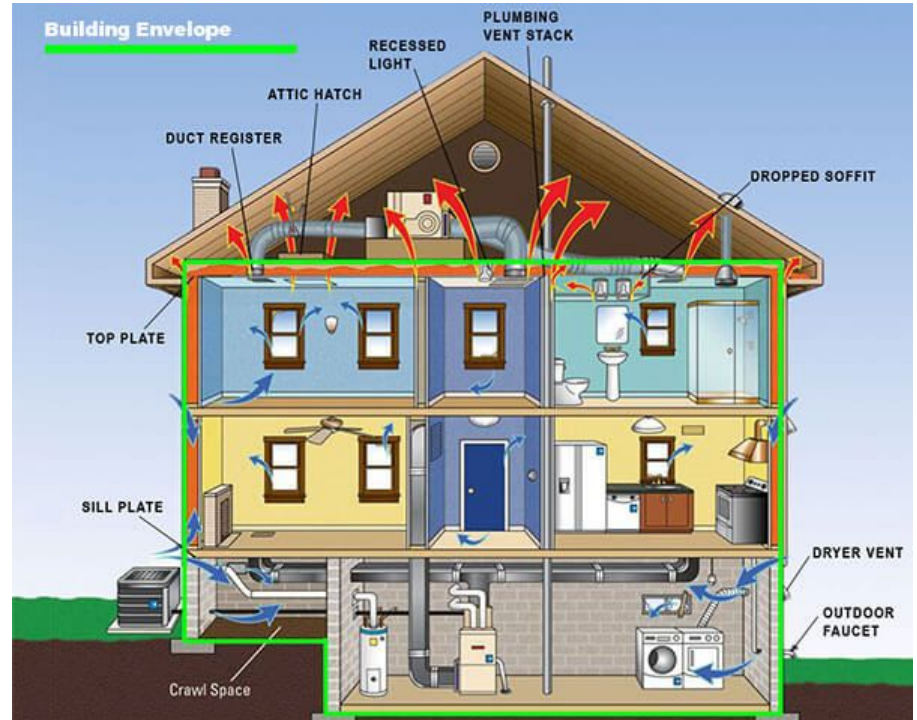
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# BUILDING SYSTEMS: BUILDING ENVELOPES



Green Building Advisor



ECHOtape Building Envelope

# WATER RESPONSE PREPAREDNESS



Western Museums Association



Western Museums Association



## WATER RESPONSE PREPAREDNESS



- Towels
- Mops
- Sorbent snakes
- Paper towels
- Fans
- Clean rags

Curae LLC, emergency supplies

# EMERGENCY RESPONSE



North Carolina Preservation Consortium

When a water event occurs, who responds? What are the key first steps?



# STEPS FOR WATER RESPONSE

1. Call first responders
2. Ensure all staff and visitors are safe and accounted for
3. Maintain security of building and collections
4. Activate Communication/Disaster team if applicable

Council of State Archivists: Pocket Response Plan

When a water event occurs, who responds? What are the key first steps?

# STEPS FOR WATER RESPONSE

1. Stop the source of water, remove standing water if possible- also, electricity!
2. Cover Collections with plastic sheeting
3. Remove materials from water path: move collections to higher on shelves or other furniture
4. Identify materials needing immediate salvage action: coated paper, leather bindings, unstable inks, artwork, film, etc.



New York Times, 9/11 Museum

Council of State Archivists: Pocket Response Plan

When a water event occurs, who responds? What are the key first steps?

# CONSIDERATIONS FOR WATER RESPONSE

## 1. Human Health and Safety

- Where is the water coming from?
- Is it contaminated, i.e. sewage or gray water?
- What else could be in the water based on its path- toxins, biological hazards etc.
- If we are unsure, then extra precaution should be taken...as if it is contaminated



When a water event occurs, who responds? What are the key first steps?

# LIFE SAFETY: MENTAL AND PHYSICAL HEALTH

## Potential Dangers onsite at re-entry

- Structural Building Damage
- Electrical
- Gas/Explosion
- Soot, Ash, Other Particulate
- Mold
- Carbon Monoxide
- Volatile Organic Compounds
- Sewage, Petroleum
- Corrosives (Bleach, Acids)
- Asbestos
- Lead
- Poisons, Pesticides
- Intruders

Connecting to Collections Care, After Disasters- Duhl



Engineered Systems Magazine

# PPE

**Personal Protective Equipment (PPE)**- protective clothing, helmets, gloves, face shields, goggles, facemasks and/or respirators or other equipment designed to protect the wearer from injury or the spread of infection or illness.

PPE should not be optional- it is an essential piece of workplace culture and should be prioritized and kept on hand.



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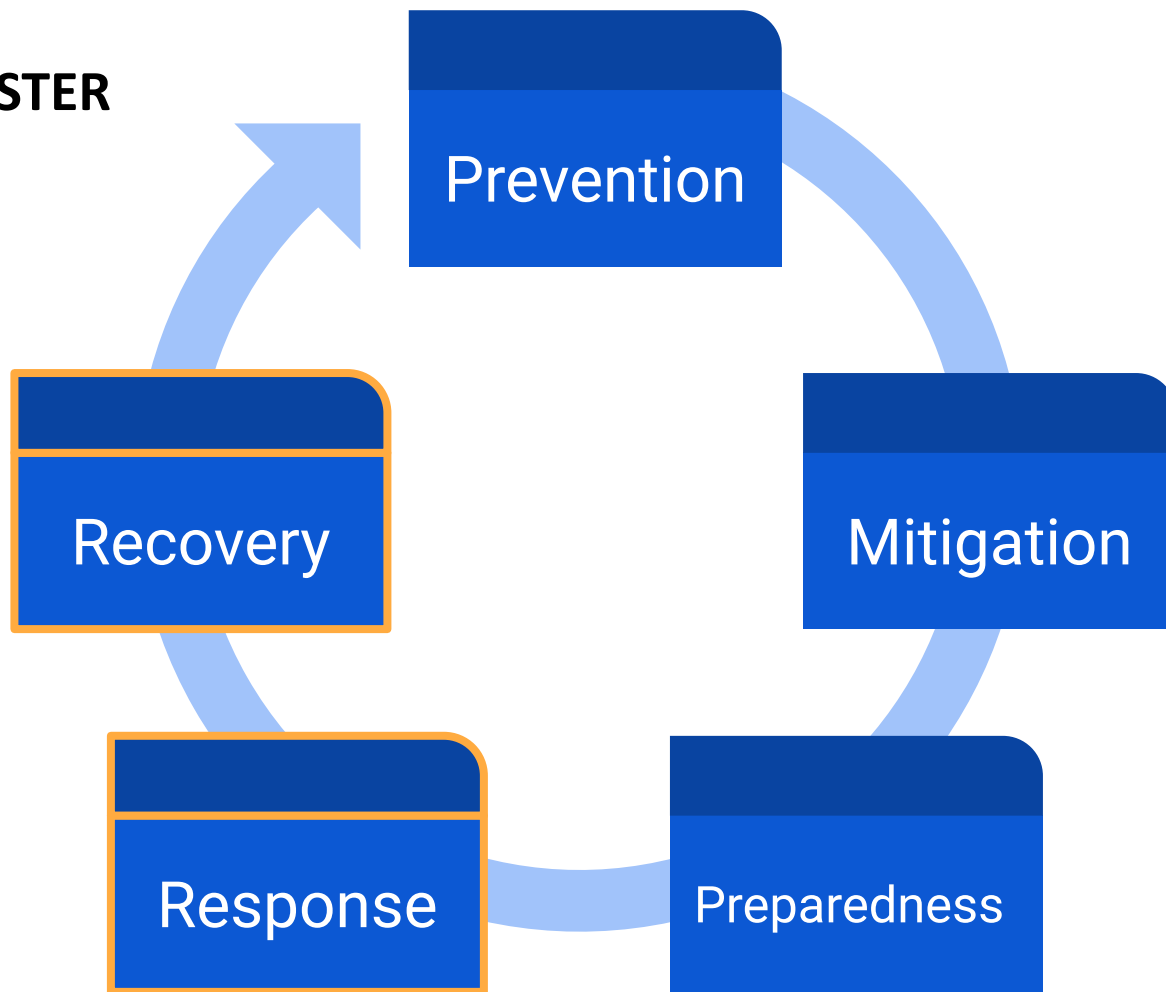
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# INTRODUCING WET SALVAGE FOR COLLECTIONS

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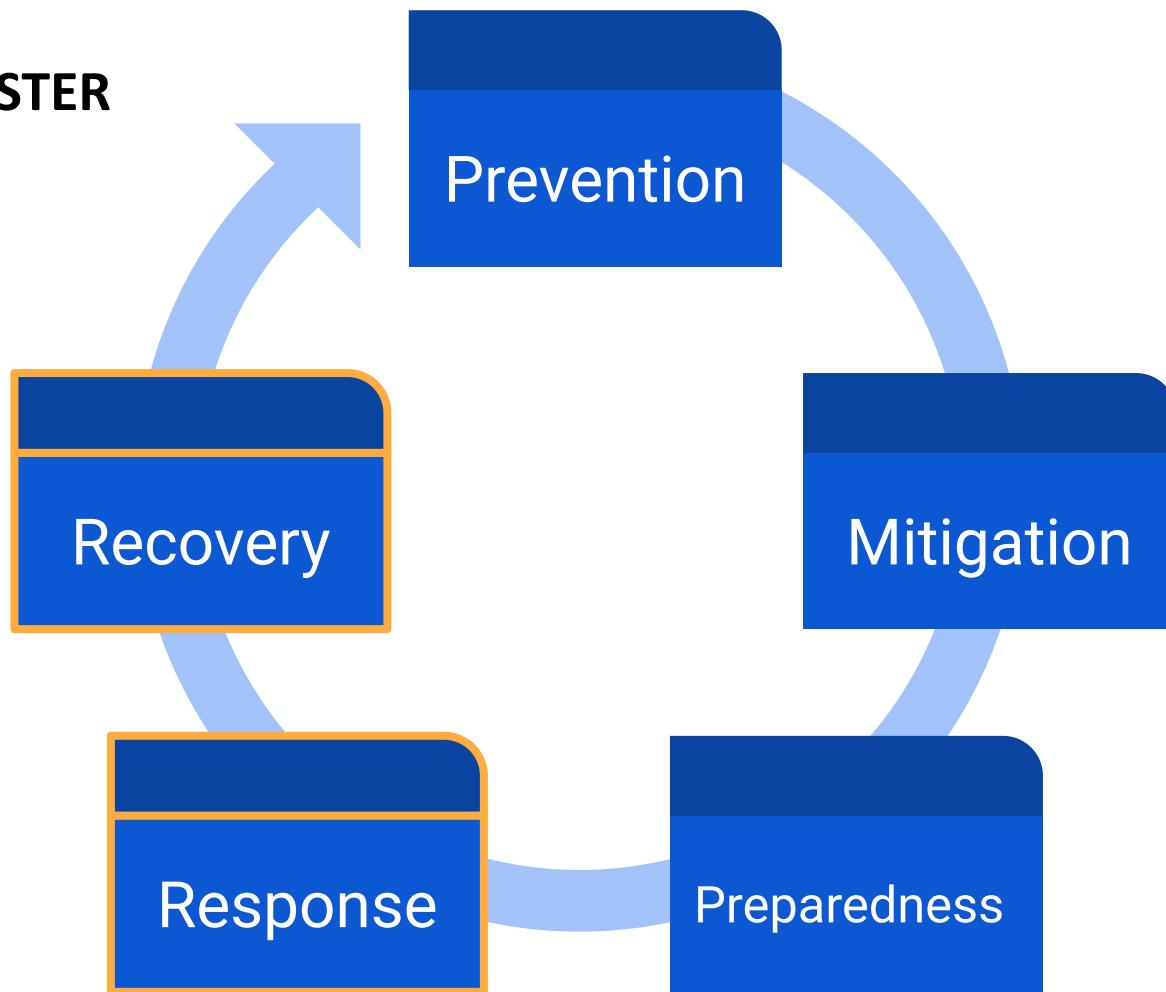
# EMERGENCY AND DISASTER RESPONSE





# EMERGENCY AND DISASTER RESPONSE

**Salvage-** activities to rescue or recover at risk collections and stabilize them, often moving them to a new location



# DISCUSSION

What risks does salvage activity introduce to collections?



# WET SALVAGE THINGS TO CONSIDER

Materials Change when they get wet



# WET SALVAGE THINGS TO CONSIDER

Materials Change when they get wet

- They become more vulnerable
- Their parts may separate
- Many materials become weaker
- They may be completely unstable
- They may chemically change



Washington Conservation Guild

# WET SALVAGE THINGS TO CONSIDER



National Park Service

Basic object handling requires training...but when we handle wet objects, we have to adjust normal handling protocols to be even more careful. Your *trained* response team is going to be essential.

# WET SALVAGE THINGS TO CONSIDER



Smithsonian Institution Archives

## Items that may be considered as a higher priority

- Valuable Materials
- Fragile Materials
- Unique Items
- Borrowed Items
- Institutional Records
- Organic Materials: Paper, Photos, Textiles, Feathers, Pliable Leathers
- Unaffected Collections ←

## Items that may be as a lower priority

- Duplicate or Replaceable Items
- Inorganic Materials: Glass, Metal, Stone, Ceramics
- Unaffected Collections ←

Connecting to Collections Care: After Disaster, Duhl

Salvage of collections is **triage**- we are doing just as much as is necessary to stabilize our collections. We are also prioritizing objects that are more sensitive to emergency events.



# WET SALVAGE THINGS TO CONSIDER



Smithsonian Institution Archives

Working quickly to prevent

- Mold growth
- Corrosion
- Staining/bleeding
- Other physical damage

Freezing collection items can buy time

- Prepare collections by wrapping with freezer paper
- Freezing in a household freezer is an option, but adjust to the coldest possible setting.

# HANDLING DIFFERENT TYPES OF ARTIFACTS IN WATER



Smithsonian Institution Archives

1. What is your object telling you? What does it need?
2. Use tools
3. Direct others how to help
4. Know where you are going before you go



BREAK (10 Minutes)



Lunch (1 hour)



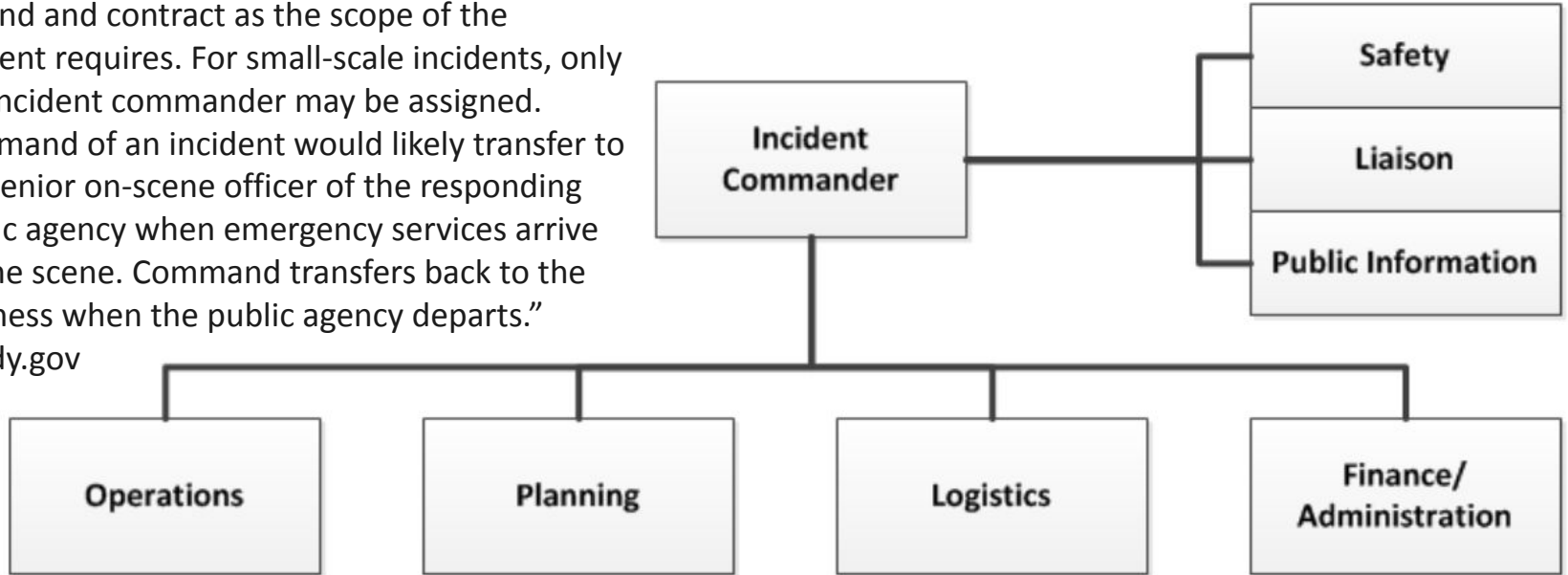
TEAMS

DURING AND AFTER SALVAGE

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# INCIDENT COMMAND SYSTEM

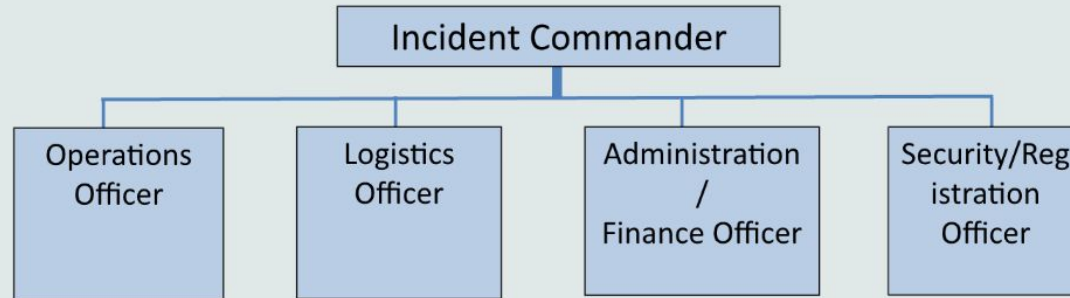
“Not all of the ICS positions need to be active in each incident. The ICS structure is meant to expand and contract as the scope of the incident requires. For small-scale incidents, only the incident commander may be assigned. Command of an incident would likely transfer to the senior on-scene officer of the responding public agency when emergency services arrive on the scene. Command transfers back to the business when the public agency departs.”  
-ready.gov



# TEAMS DURING RESPONSE

## Incident Command System

### Small Cultural Institution



**Commander:** develops and directs objectives, strategies, and priorities

**Operations:** tactical implementation of objectives and resources

**Logistics:** support, resources, and services to meet objectives

**Admin/Finance:** accounting, procurement, time recording, cost analysis

**Security/Registration:** monitors site, people, and collections

- ICS is a great starting point for assigning roles, but teams should be based on what is realistic for your institution

## DISCUSSION

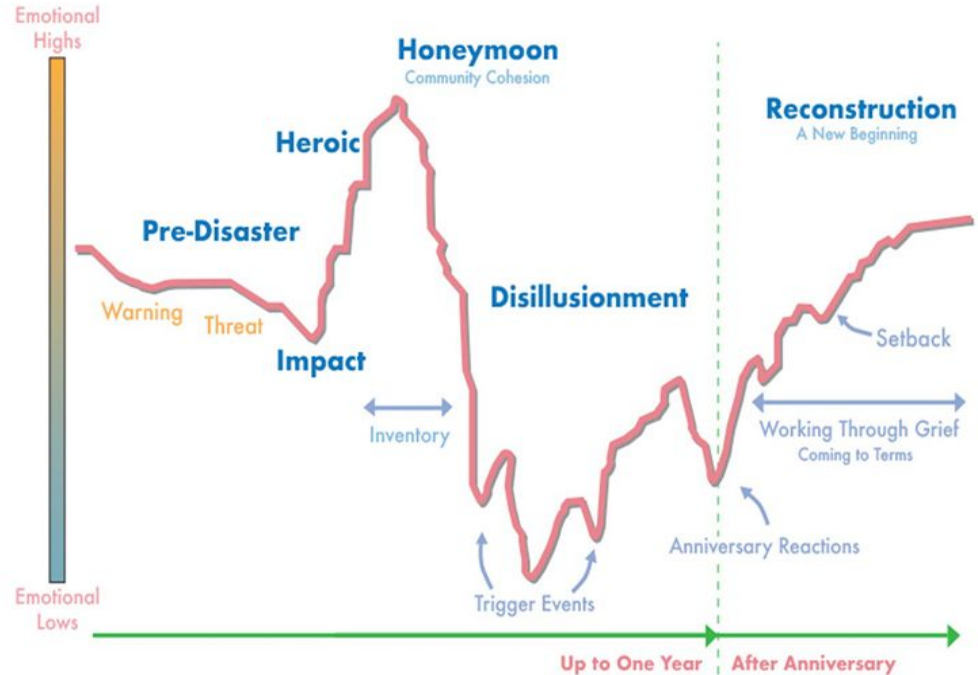
What kind of team roles would be realistic for your institution?

What kind of training do those roles require?



# DISASTER RECOVERY

- Disaster recovery is much more than immediate emergency response
- Recovery often takes YEARS



Phases of a Disaster, SAMHA

# RECOVERY: THE YEARS AFTER



- Documentation
- Assessment
- Consultation
- Fundraising
- Reporting and learning



# Wrap-Up

- Reflections from the day
- Evaluation

# Thank you!

Marie Desrochers | [mdesrochers@utah.gov](mailto:mdesrochers@utah.gov)  
<https://artsandmuseums.utah.gov/utah-collections-preservation/>

This project was made possible in part by the National Endowment for the Humanities.



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UTAHHUMANITIES  
Ideas in Action



Utah Division of  
Arts & Museums